

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. FIS920040005US1 (17369)	SERIAL NO. 10/709,963
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANTS Jochen Beintner, et al.	
(Use several sheets if necessary)		FILING DATE June 9, 2004	GROUP ART UNIT 2812 2891

## U.S. PATENT DOCUMENTS

EXAMINER R INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CC	3,602,841	08/31/71	McGroddy			
↑	4,665,415	05/12/87	Esaki, et al			
	4,853,076	08/01/89	Tsaur, et al			
	4,855,245	08/08/89	Neppl, et al			
	4,952,524	08/28/90	Lee, et al			
	4,958,213	09/18/90	Eklund, et al			
	5,006,913	04/09/91	Sugahara, et al			
	5,060,030	10/22/91	Hoke			
	5,081,513	01/14/92	Jackson, et al			
	5,108,843	04/28/92	Ohtaka, et al			
	5,134,085	07/28/92	Gilgen, et al			
	5,310,446	05/10/94	Konishi, et al			
	5,354,695	10/11/94	Leedy			
	5,371,399	12/6/94	Burroughes, et al			
	5,391,510	02/21/95	Hsu, et al			
	5,459,346	10/17/95	Asakawa, et al			
	5,471,948	12/05/95	Burroughes, et al			
	5,557,122	09/17/96	Shrivastava, et al			
	5,561,302	10/01/96	Candelaria			
	5,565,697	10/15/96	Asakawa, et al			
	5,571,741	11/05/96	Leedy, et al			
	5,592,007	01/07/97	Leedy			
	5,592,018	01/07/97	Leedy			
	5,670,798	09/23/97	Schetzina			
	5,679,965	10/21/97	Schetzina			
	5,683,934	11/04/97	Candelaria			
	5,840,593	11/24/98	Leedy			
↓	5,861,651	01/19/99	Brasen, et al			
CC	5,880,040	03/09/99	Sun, et al			

Examiner

Chandra Chaudhari

Date Considered

12-05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPRP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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~~2012~~ 2891

(Use several sheets if necessary)

CC		5,940,736	08/17/99	Brady, et al			
↑		5,946,559	08/31/99	Leedy			
		5,960,297	09/28/99	Saki			
		5,989,978	11/23/99	Peidous			
		6,008,126	12/28/99	Leedy			
		6,025,280	02/15/00	Brady, et al			
		6,046,464	04/04/00	Schetzina			
		6,066,545	05/23/00	Doshi, et al			
		6,090,684	07/18/00	Ishitsuka, et al			
		6,107,143	08/22/00	Park, et al			
		6,117,722	09/12/00	Wuu, et al			
		6,133,071	10/17/00	Nagai			
		6,165,383	12/26/00	Chou			
		6,221,735	04/24/01	Manley, et al			
		6,228,694	05/08/01	Doyle, et al			
		6,246,095	06/12/01	Brady, et al			
		6,255,169	07/03/01	Li, et al			
		6,261,964	07/17/01	Wu, et al			
		6,265,317	07/24/01	Chiu, et al			
		6,274,444	08/14/01	Wang			
		6,281,532	08/28/01	Doyle, et al			
		6,284,623	09/04/01	Zhang, et al			
		6,284,626	09/04/01	Kim			
		6,319,794	11/20/01	Akatsu, et al			
		6,361,885	03/26/02	Chou			
		6,362,082	03/26/02	Doyle, et al			
		6,368,931	04/09/02	Kuhn, et al			
		6,403,486	06/11/02	Lou			
		6,403,975	06/11/02	Brunner, et al			
		6,406,973	06/18/02	Lee			
↓		6,461,936	10/18/02	Von Ehrenwall			
CC		6,476,462	11/05/02	Shimizu, et al			

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(Use several sheets if necessary)

CC	6,493,497	12/10/02	Ramdani, et al		
CC	6,498,358	12/24/02	Lach, et al		
CC	6,501,121	12/31/02	Yu, et al		
CC	6,506,652	01/14/03	Jan, et al		
CC	6,509,618	01/21/03	Jan, et al		
CC	6,521,964	02/18/03	Jan, et al		
CC	6,531,369	03/11/03	Ozkan, et al		
CC	6,531,740	03/11/03	Bosco, et al		

## U.S. PATENT APPLICATION PUBLICATION DOCUMENTS

EXAMINE R INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CC	2001/000978 4 A1	07/26/01	Ma, et al			
CC	2002/007459 8 A1	07/20/02	Doyle, et al			
CC	2002/008647 2 A1	07/04/02	Roberds, et al			
CC	2002/008649 7 A1	07/04/02	Kwok			
CC	2002/009079 1 A1	07/11/02	Doyle, et al			
CC	2003/003226 1 A1	02/13/03	Yeh, et al			
CC	2003/004015 8 A1	02/27/03	Saitoh			
CC	2003/005718 4 A1	03/27/03	Yu, et al			
CC	2003/006703 5 A1	04/10/03	Tews, et al			

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12-05

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Form PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Atty. Docket No. FIS920040005US1 (17369)		Serial No. 10/709,963		
<b>LIST OF PRIOR ART CITED BY APPLICANT</b>  (Use several sheets if necessary)				Applicants Jochen Beintner, et al.				
				Filing Date June 9, 2004		Group <del>2812</del> 2891		
<b>FOREIGN PATENT DOCUMENTS</b>								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
CC		EPO 01/62362	26/06/89	Europe	_____	_____		
CC		EP 1 174 928 A1	01/23/02	Europe	_____	_____		
CC		EP 0 967 636 A2	12/29/1999	Europe	_____	_____		
CC		WO 02/454156 A2	06/06/2002	PCT	_____	_____		
CC		WO 94/27317	05/06/1993	PCT	_____	_____		
<b>OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>								
CC		Rim, et al., "Transconductance Enhancement in Deep Submicron Strained-Si n-MOSFETs", International Electron Devices Meeting, 26, 8, 1, IEEE, September 1998						
CC		Rim, et al. "Characteristics and Device Design of Sub-100 nm Strained Si N- and PMOSFETs", 2002 Symposium On VLSI Technology Digest of Technical Papers, IEEE, pp 98-99						
CC		Scott, et al. "NMOS Drive Current Reduction Caused by Transistor Layout and Trench Isolation Induced Stress", International Electron Devices Meeting, 34.4.1, IEEE, September 1999						
CC		Ootsuka, et al. "A Highly Dense, High-Performance 130nm node CMOS Technology for Large Scale System-on-a-Chip Application", International Electron Device Meeting, 23.5.1, IEEE, April 2000						
CC		Ito, et al. "Mechanical Stress Effect of Etch-Stop Nitride and its Impact on Deep Submicron Transistor Design", International Electron Devices Meeting, 10.7.1, IEEE, April 2000						
CC		Shimizu, et al. "Local Mechanical-Stress Control (LMC): A New Technique for CMOS-Performance Enhancement", International Electron Devices Meeting, IEEE, March 2001						
CC		Ota, et al. "Novel Locally Strained Channel Technique for high Performance 55nm CMOS", International Electron Devices Meeting, 2.2.1, IEEE, February 2002						
CC		Ouyang, et al. "Two-Dimensional Bandgap Engineering in a Novel Si/SiGe pMOSFETS With Enhanced Device Performance and Scalability", Microelectronics Research Center, pp 151-154, 2000 IEEE						
CC		Sayama et al., "Effect of <Channel Direction for High Performance SCE Immune pMOSFET with Less Than 0.15um Gate Length" ULSI Development Center, pp27.5.1-27.5.4, 1999 IEEE						
EXAMINER <u>Chandra Chaudhori</u>				DATE CONSIDERED <u>12-05</u>				
* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

<b>Title of Invention</b>	<b>RAISED STI PROCESS FOR MULTIPLE GATE OX AND SIDEWALL PROTECTION ON STRAINED Si/SGOI STRUCTURE WITH ELEVATED SOURCE/DRAIN</b>
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Application Number :

10/709,963

Confirmation Number:

First Named Applicant:

Jochen Beintner

Attorney Docket Number:

FIS920040005

Art Unit:

2891

Examiner:

Search string:

( 4881105 or 5801081 or 5858825 or 5874328 or 6184105 or 6197657 or 6248643  
or 6333242 or 6350662 or 6358801 or 6583000 or 20010036709 or 20020094649 or  
20030119257 or 20030141548 ).pn

## US Patent Documents

**Note: Applicant is not required to submit a paper copy of cited US Patent Documents**

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
CC	1	4881105	1989-11-14	Davari et al.			
↑	2	5801081	1998-09-01	Warashina et al.			
	3	5858825	1999-01-12	Alsmeier et al.			
	4	5874328	1999-02-23	Liu et al.			
	5	6184105	2001-02-06	Liu et al.			
	6	6197657	2001-03-06	Tsukamoto			
	7	6248643	2001-06-19	Hsieh et al.			
	8	6333242	2001-12-25	Hwang et al.			
	9	6350662	2002-02-26	Thei et al.			
↓	10	6358801	2002-03-19	Fazan et al.			
CC	11	6583000	2003-06-24	Hsu et al.			

## US Published Applications

**Note: Applicant is not required to submit a paper copy of cited US Published Applications**

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
CC	1	20010036709	2001-11-01	Andrews et al.			
CC	2	20020094649	2002-07-18	Arthanari et al.			
CC	3	20030119257	2003-06-26	Dong et al.			

Chandra Chaudhari

12-05

cc	4	20030141548	2003-07-31	Anderson et al.			
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**Signature**

Examiner Name	Date
Chandra Chaudhari	12-05